

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please amend the paragraph beginning on page 3, line 4, to read as follows:

The invention of ~~claim 1~~ for solving the above problem is a roller screw comprising: a screw shaft (1) formed, on an outer peripheral surface thereof, with a spiral roller rolling groove (1a) having a V-shape in section; a nut member (2) formed, on an inner peripheral surface thereof, with a spiral loaded roller rolling groove (2a) having a V-shape in section opposing to the V-shaped roller rolling groove (1a) of the screw shaft (1); and a number of rollers (6) disposed between the roller rolling groove (1a) and the loaded roller rolling groove (2a), wherein a number of rollers (6) include a roller group (α group) bearing the load ((1)) in axial one direction of the screw shaft (1) and a roller group (β group) arranged in cross shape to be perpendicular to the axis of the α group roller in a roller advancing direction and adapted to bear the load ((2)) in an direction opposing to the axial one direction of the screw shaft (1), and each of the number of rollers (6) has a diameter (D) larger than a distance between a wall surface of the roller rolling groove (1a) and a wall surface of the loaded roller rolling groove (2a) which opposes to the above-mentioned wall surface.

Please amend the paragraph beginning on page 3, line 20, to read as follows:

The invention of ~~claim 2~~ is a roller screw comprising: a screw shaft (1) formed, on an outer peripheral surface thereof, with a spiral roller rolling groove (1a) having a V-shape in section; a nut member (2) formed, on an inner peripheral surface thereof, with a spiral loaded roller rolling groove (2a) having a V-shape in section opposing to the V-shaped roller rolling groove (1a) of the screw shaft

(1); and a number of rollers (6) disposed between the roller rolling groove (1a) and the loaded roller rolling groove (2a), wherein the loaded roller rolling groove (2a) of the nut member (2) includes a central groove section (22) having a pitch larger than a pitch (P1) of the screw shaft (1) and a pair of end groove sections (23, 24) disposed on both sides of the central groove section and having a pitch equal to the pitch (P1) of the screw shaft.

Please amend the paragraph beginning on page 4, line 5, to read as follows:

The invention of ~~claim 3~~ is a roller screw comprising: a screw shaft (1) formed, on an outer peripheral surface thereof, with a spiral roller rolling groove (1a) having a V-shape in section; a nut member (2) formed, on an inner peripheral surface thereof, with a spiral loaded roller rolling groove (2a) having a V-shape in section opposing to the V-shaped roller rolling groove (1a) of the screw shaft (1); and a number of rollers (6) disposed between the roller rolling groove (1a) and the loaded roller rolling groove (2a), wherein the nut member (2) is divided in an axial direction into a first nut piece (12) and a second nut piece (12), and a shim (13) is disposed between the first and second nut pieces so as to apply compression loads to the rollers for the first nut piece (12) disposed in the first nut piece and to the rollers for the second nut piece (12) disposed in the second nut piece.

Please amend the paragraph beginning on page 4, line 18, to read as follows:

According to the invention of ~~claim 1~~, by applying the preload, both the α and β group rollers are loaded, so that twice number of rollers are loaded. Accordingly, the rollers existing inside the nut member is effectively utilized against the external force acted, and the load can be distributed to the

rollers to which load is essentially not applied, thus improving the rigidity. On the contrary, if rollers each having a diameter smaller than a distance (prescribed dimension) between the wall surface of the roller rolling groove and the wall surface of the loaded roller rolling groove are used, only one of the α and β group rollers is loaded in the axial direction. Thus, only the half number of rollers is loaded.

Please amend the paragraph beginning on page 5, line 2, to read as follows:

According to the invention of ~~claim 2~~, there is provided the roller screw having a increased rigidity by applying the preload.

Please amend the paragraph beginning on page 5, line 4, to read as follows:

According to the invention of ~~claim 3~~, there is provided the roller screw having a increased rigidity by applying the preload.

Please amend the paragraph beginning on page 5, line 22, to read as follows:

~~Explanation of Reference Numerals~~

~~1—screw shaft, 1a—roller rolling groove, 2—nut member, 2a—loaded roller rolling groove, 6—roller, 22—central groove, 23, 24—end groove, 12, 12—divided nut (first nut member, second nut member), 13—shim.~~